

Parnassia kotzebuei Cham. ex. Spreng.

Kotzebue's grass of Parnassus
Saxifragaceae (Saxifrage Family)

Status: State Sensitive

Rank: G4S1

General Description: Glabrous perennial up to 4 in. (10 cm) tall; root stalks are short and erect; flowering stems mostly single, bractless or with a near-basal, ovate to lanceolate non-clasping bract up to ½ in. (15 mm) long; petioles as long as or considerably longer than the blades; leaf blades are basal and petiolate, ovate to elliptic, spade shaped, attached to the main stem by a stalk; calyx adnate to the ovary, the segments narrowly oblong-lanceolate, up to ¼ in. (7 mm) long, usually three nerved; flowers small, less than 1 in. (2½ cm) across, white, petals 5, 1-3 veined, 1/8 to 3/16 in. (3 to 4 mm) long; stamens 5, alternating with sterile staminodia that consist of short linear scales that may have 1 to 3 teeth; filaments rather slender, mostly equal to the sepals in length and considerably longer than the staminoidia, capsule up to 1/2 in. (1 cm) long.

Identification Tips: *Parnassia kotzebuei* is most closely related to *P. parviflora* and *P. palustris*. These species can be distinguished by the nature of the flowering stems, petals, staminodia, and anthers. The flowering stems of *P. kotzebuei* are bractless or with a near-basal bract, its petals are 1 to 3 nerved and usually only about half as long as the filaments, its staminodia have 1 to 5 segments and are usually only about half as long as the filaments, and its anthers are less than 1/32 in. (1 mm long). The flowering stems of *P. parviflora* and *P. palustris* usually have a bract above the level of the basal leaves, they have 5 to 13 veined petals that are most often considerably longer than the calyx lobes, its staminodia have 5 to numerous segments and are usually well over half as long as the filaments, and its anthers are at least 1/32 in. (1 mm) long.

Phenology: The species flowers from June to September.

Range: *Parnassia kotzebuei* occurs in the Arctic tundra in Alaska southward in the Rocky Mountains to British Columbia and in a few localities in Montana, Wyoming, and the Ruby Mountains of Nevada, also in north eastern North America, and the Cape Peninsula to Greenland and in Asia. Disjunct in Washington, *Parnassia kotzebuei* is found in the Cascade Mountains of Okanogan County.

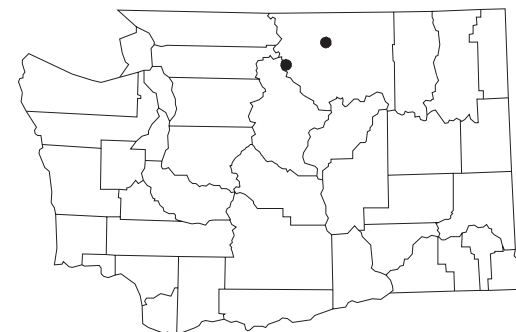
Parnassia kotzebuei

Kotzebue's grass of Parnassus



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Known distribution of
Parnassia kotzebuei
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Habitat: This species typically grows in moist sub-alpine areas in meadows, thickets, and along creeks in boggy soil. It is found in Washington near vertical granite cliffs on damp mossy ledges and in rocky seepage areas ranging from 4,800-6,700 ft (1460-2030 m) in elevation.

Ecology: Competitive ability has not been examined, but apparently the species grows well in association with clumps of moss. Rocks immediate to the species' habitat were observed to be rich in copper.

State Status Comments: Two recent occurrences are known in Washington from Okanogan County. The narrow range and limited number of known populations account for the sensitive status of this species.

Inventory Needs: Additional inventory is needed in appropriate habitats.

Threats and Management Concerns: Mining and plant collecting.

References:

Hitchcock, C.L., A. Cronquist, M. Ownbey and J.W. Thompson. 1961. *Vascular Plants of the Pacific Northwest, Part 3: Saxifragaceae to Ericaceae*. University of Washington Press, Seattle, WA. 614 pp.